

**HR ANALYTICS AS A PRECURSOR FOR ORGANIZATIONAL  
PERFORMANCE AND COMPENSATION STRATEGIES: AN  
EXPLORATORY STUDY IN SELECT INDIAN  
ORGANIZATIONS**

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# ABSTRACT

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Human Resource Management has developed extensively over the decade and become quite renowned as years pass by, and now it is one of the most vibrant joint characteristics for practically all the organizations worldwide. The main cause of its status is the assumption that HRM is a foundation for competitive advantage which in turn sways the organizational outcomes and performance that generally leads to a cutting-edge path. For achieving a competitive upper hand over its opponents every organization must line up their HRM strategies with its comprehensive business approaches. Hence for doing so, organizations must embrace the emergence of new IT technology in every functional department. As human resources are a vital part of every business, adaptation of new IT technology namely HR analytics gives them a better advantage to tackle every problem of HRM and gives a better advantage. The research undertaken explores more in detail and evaluates the presumed relationship between HRM strategies and organizational performance with HR analytics as a mediator. The chief indication behind the HRM strategies and organizational performance idea is that HR strategies have a significant effect on the members of staff outlooks and performance that promotes better operational performance, such as efficiency, excellence and modernization, which in turn have a constructive outcome on the market and financial performance.

The main objective of the study is to understand how the various HR strategies impacts the overall organizational performance especially when HR Analytics mediates their relationship among the organizations in Indian context.

### **BACKGROUND OG THE STUDY**

For securing suitable sustainability and development, every organization's essential goal is to achieve highest profitability and good outcomes. For achieving its overall objectives, human resources needs to be managed to its highest possible means so that they can contribute to increased its performance resulting in improved organizational performance. Presently organizations have admitted the fact that the firm's human resources are a vital part and a unique foundation to gain competitive advantage over its competitors. Barney (1991) summaries that people employed in organizations are a basis for competitive advantage unlike other sources, which means these resources are quite rare and tough to replicate by its opponents. Presently it can realized that many companies all around the globe are having units and staffs who are utterly dedicated in handling these human resources. As the time passes it can be seen that Human Resource Management (HRM) has progressively turn out to be a strategic contributor giving substantial value to the organization for better competitive advantage.

Human Resource Management has advanced in numerous forms and plays innumerable different parts such as human capital, laborers, personnel and currently human resources. New revolutionizing roles of HR also mean alterations in the approach of

human resource managers planning's and their strategies in managing their workforce. The advancement of Human Resource Management is improved over the time, before when people were mistreated in slavery working environments to the current modern settings where employees are now given more value, appreciations and regarded as inevitable strategic partners to business.

In today's utmost competitive world, business has become the device which is wholly about investments, revenues and profits. Every single function of business is now calculated in numbers and values, then why must HR be left behind. Human resources has always been the vital asset for organizations for gaining the competitive edge in this competitive market. Nonetheless management of these resources has constantly generated a challenge among the HR professionals. However that breached has been filled up with the support of HR analytics the latest IT technological software which renovates the raw HR data into insightful fact based story which enlightens the HR managers to frame a better policies and strategies that will create better opportunity for the every organization. HR analytics helps the Senior HR management to quantify the value of human resources which justifies the investments backing up with the hard reliable evidence. HR analytics helps the HR management to produce net benefits gained from the initiative.

Armstrong (2006) has defined human resource management as the strategic and coherent approach to the management of an organization's most valued assets – the people working there who individually and collectively contribute to the achievement of its objectives. From this definition, we came to understand that essentially HR will be a work to associations intended will expand Worker execution in administration from claiming their employer's vital destinations. (Johanson, 2009). HR is primarily concerned with how people are managed within organizations, focusing on policies and systems (Collings & Wood, 2009). HR departments and units in organizations are typically responsible for several activities, including employee recruitment, training and development, performance appraisal, and rewarding (e.g., managing pay and benefit systems) (Paauwe & Boon, 2009).

HR as a tool for competitive advantage aids every organization in quantification of the challenges like staffing & recruitment issue, succession planning, attrition, compensation, performance management, retention problem, training and development, HR effectiveness measurements and many more which are being faced by HR. Being a perennial problem ever, F.W. Taylor has suggested in his book "Principles of Scientific Management" how to improve the economic efficiency, especially the labor productivity with the application of scientific methods. "Time and motion study", suggests the using of standardized tools and implementation of standardized work methods that synthesizes the workflow in

the organization hence greatly improving the productivity of the employees wherever applied. Thus, Taylorism has built the foundation to transform HRM today. Owing to the rapid economic variations and globalization, Human Resource department is regularly facing trials and are in constant predicament towards decision making. Every passing day each challenge is becoming more intense. The high attrition rate is one of the most volatile factors in any organization. If turnover rate can be predicted accurately then it will aid in better workforce planning. This will aid the HR managers to develop better compensation and benefits packages hence reducing employee turnover. Since each variables of HR is interrelated, knowing the cause and effect of one problem can help device solutions for all the others.

### ***EMERGENCE OF HR ANALYTICS***

HR professionals have been bearing enormous responsibilities on their shoulders presently. They look after starting from the staffing to hiring, payroll, and compensation, performance management, succession planning etc. HR contributes a lot to the organization from every aspect. As the role of HR does not directly connected to generation of revenue, so their value in the organization is generally unappreciated.

For a very long time, HR has struggled to verify its identity. Presently HR has succeeded in finding its new way which is away from a traditional support role to

becoming more strategic and data driven one. For many of HR experts, the role has more become about the numbers and analytics. Just as how the data has changed marketing, put through its paces towards the HR as well.

Lately HRA has turn out to be a huge phrase in the world of human resource management. HRA is mainly established profoundly on concepts and notions which have existed in the field of HR extensively. Bassi (2011), noted that back as far as late 1970s, metrics and measurements were always considered. Fitz –Enz (1984) also stated that HR researchers tackled with problems associated with the measurement of human resource management over 30 years back. The HRM ancestries can be sketched back to the writing of Peter Drucker’s from the 1950s, where HRM made its big revolution in the mid-1980s (Beer, 2015; Kaufman, 2015; Marciano, 1995). Later in the late 1990s, the attention has moved from looking at the individuals as a profitable authoritative asset to the ability that can make upper hand to gain competitive edge (Barney & Wright, 1998; Huselid, 1995; Pfeffer, 1994; Ulrich, 1997; Ulrich & Lake, 1990; Wright, Dunford, & Snell, 2001). Therefore, the new key buzzwords, human and intellectual capital become successively vital in both research academic and in the management community world (Stewart, 1997; Edvinsson, 1997; Ulrich, 1998). In the years that took after, much consideration was coordinated at growing new technologies and techniques for figuring out the ROI on human capitals. (Fitz-Enz, 2000; Bontis & Fitz-Enz, 2002).

Innovation for instance HR Scorecards and Workforce Scorecards has been developed in the first half of the 2000s,(Huselid, Becker, & Beatty, 2005; Ulrich & Beatty, 2001). These tools allowed organizations to estimate and quantify the influence of HR affairs on performance of the organization.

In the mid- 2000s, more scientific and evidence-based methods to HR were being called upon (Boudreau & Ramstad, 2007; Pfeffer & Sutton, 2006; Rynes, Colbert, & Brown, 2002; Rynes, Giluk, & Brown, 2007). HRA relatively has become to be the theme of discussion in many journals that mainly are centralizing on HR and people strategy (e.g. Feather, 2007; Fink, 2010; Levenson, 2005, 2011; Waber, 2013).

In the previous couple of years, HRA has received substantial attention in prominent oriented practitioner of management outlets like Harvard Business Review, and others in their sequence of reports that are especially written by the global consulting and technology giants. HRA the current buzzword is presently the theme of much discussion in the HR works (Rasmussen & Ulrich, 2015; Ulrich & Dulebohn, 2015). The chief emphasis of the research on HRA is mainly on how to use HRA as a decision assistance tool that forecast the future actions, which is known as the “predictive analytics” (Fitz-Enz & John Mattox, 2014; van den Heuvel & Bondarouk, 2016, p. 8). Also it is clear that the proliferation and accessibility of Big Data has made ready for HRA, as a great part of the reasoning

around HRA has been created in the result of the presentation of Big Data (Angrave et al., 2016). Big Data creates an endless possibilities to make usage of the enormous volumes of data that supports in the HR-related decision making processes (Angrave et al., 2016; Shah, Irani, & Sharif, 2016).

For the past century, Human Resource Management has transformed drastically. It has progressed from an operational discipline and headed for a more strategic discipline. The term has gained more popularity over the period of time and the Strategic Human Resource Management (SHRM) exemplifies this. The data-driven tactic that portrays HR analytics is in line with this development. By utilizing HR analytics HR professionals does not have to bank upon gut feeling anymore. Analytics empowers the HR professionals to make data-driven verdicts. Likewise, analytics also helps to assess the efficiency of HR policies and different interventions.

The rich history of HR analytics can be traced back to the late 1900's where Fredrick W. Taylor analyzed the job performance of the employees and laid down the measurement of performance to do the job in the factory in his Scientific Management studies. . In early 1960's, decision support system (DSS) began as computer aided models created to assist with the decision making system (Bersin, 2012). Then in the late '70s and early '80s with the introduction of reporting and basic metric capabilities, came the widespread use of Human

Resources Management Systems (HRMS) and the benchmarking opportunity introduced by the Saratoga Institute. Standard practices for calculating and reporting common metrics – like turnover, headcount, EEO representations - began to take hold. The utilization of process focused metrics such as time to fill, organization-oriented metrics including HR staff employee headcount, and financial based metrics such as cost per hire, led to efforts in the '90s to use balanced scorecards to help HR leaders reflect goals and measure progress and results. (Joanne Bintliff-Ritchie, 2011)

#### **STATEMENT OF THE RESEARCH PROBLEM**

Resources are scarce. Hence every company wants to make optimum utilization of each and every scarce resource. Budgets are limited and hence everyone has their jobs cut out to make the best possible use of this limited resource. In-order to achieve this, every business function has to reduce costs, increase revenue, maximize operational efficiency and emphasize on the strategic initiatives to stay lucrative, sustain agility and achieve sustainable growth. One of the biggest challenges an organization faces is when it plans to launch a new product or services is recruiting of right people for the right job, in time for execution bearing the costs, when talent exists in the organization. Retaining the best talent is desirable for the company as it helps cut down on a lot of cost. So in order to effectively manage the best and existing talent, one needs to optimized compensation strategies so that a company can obtain a sustainable compensation

policy. Moreover it gets worst for any organization if their best talents join hands with competitors. So the bottom line is the companies cannot standardize but they need to customize their compensation strategies, tailor-made for each and every employee which will in turn help achieve greater organizational performance.

### **SIGNIFICANCE OF THE STUDY**

HR Analytics is the latest emerging area in the world of HR. Worldwide organizations are using HR Analytics for making better strategic decision. But in India, the concept is still new and very few organizations have started using HR Analytics for better workforce strategic decisions. Hence, very less research has been done in this area, which gives a lot of opportunity to explore and analyze its utilization and significance for organizational performance. Also, papers that are published are basically the whitepapers, which has given an ample opportunity for conducting empirical research and explore its in-depth knowledge.

### **RATIONALE BEHIND THE STUDY**

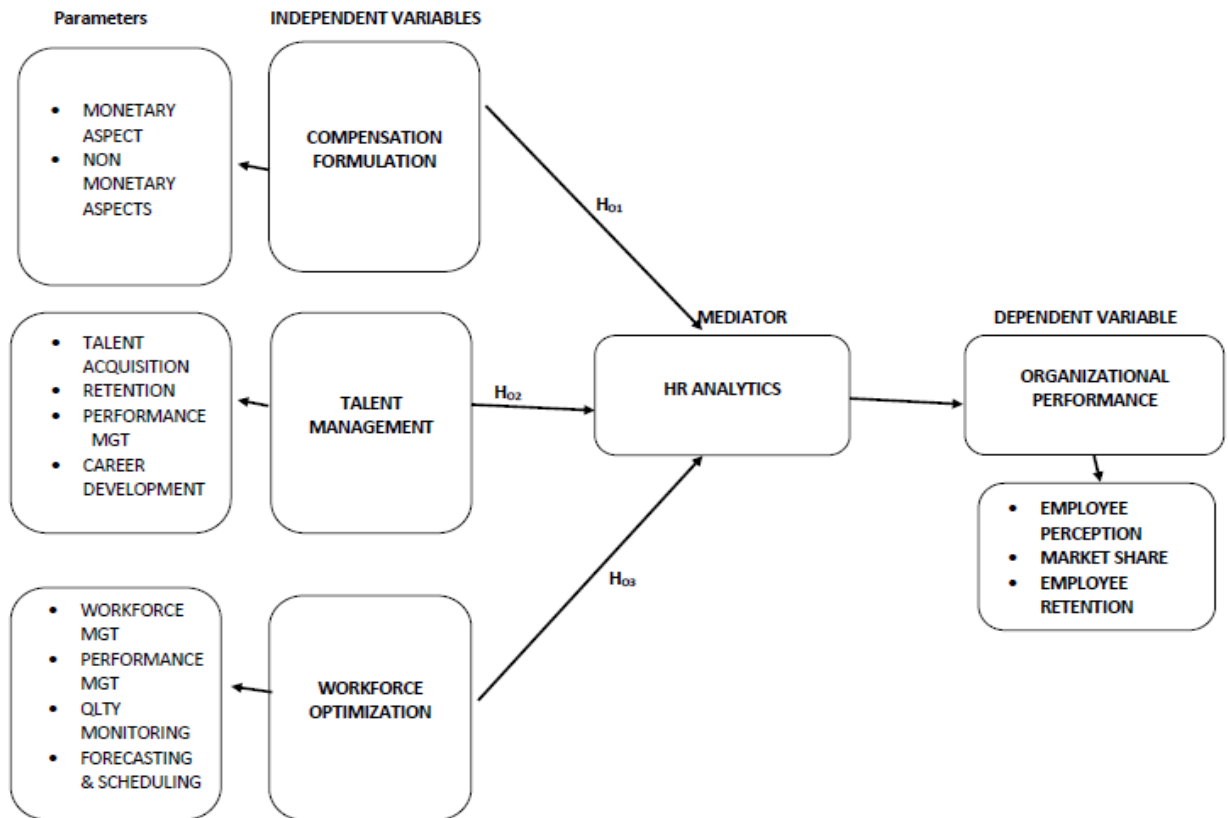
Resources are scarce. Hence every company wants to make optimum utilization of each and every scarce resource. Budgets are limited and hence everyone has their jobs cut out to make the best possible use of this limited resource. In-order to achieve this, every business function has to reduce costs, increase revenue, maximize operational efficiency and emphasize on the strategic initiatives to stay lucrative, sustain agility and achieve sustainable growth. One of the biggest

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#### **OBJECTIVES & HYPOTHESIS OF THE STUDY**

1. To study the influence of HR strategies on Organizational Performance when mediated by HR analytics
2. To study the significance relationship between compensation formulation and organizational performance when HR analytics mediates the relation between the two
3. To study the relationship between talent management and organizational performance when HR analytics mediates the relation between the two
4. To study the relationship between workforce optimization and organizational performance when HR analytics mediates the relation between the two
5. To study HR Analytics as a precursor of organizational performance

In accomplishing the purpose and goals of this research, a conceptual framework and integrated model of organizational performance under HR Analytics has been developed to assist as an outline for the study of this research.



**Fig: Conceptual Integrated Model: Organizational Performance under HR Analytics**

For analyzing the above objectives a conceptual model has been designed. So to test and validate the integrated conceptual model with a strong empirical support, the following hypothesis has been framed:

**H<sub>0</sub>:** *Influence of HR strategies on organizational Performance is not significantly mediated by HR analytics.*

The above hypothesis gives the holistic view of the integrated proposed model. In order to have an in-depth understanding of how each of the HR strategies work independently this above hypothesis was further broken down into three sub-hypothesis as:

**Hypothesis 1:** *There is no significant relationship between compensation formulation and organizational performance when HR analytics mediates the relation between the two.*

**Hypothesis 2:** *There is no significant relationship between talent management and organizational performance when HR analytics mediates the relation between the two*

**Hypothesis 3:** *There is no significant relationship between workforce optimization and organizational performance when HR analytics mediates the relation between the two*

## **RESEARCH DESIGN**

Methodology is the technique of discovering hidden answers to the taunting inquiry that starts the exploration and along these lines involves a critical part of any study. The research methodology that is chosen needs for improving the reliability and conjecture of the outcomes. The topics which has been covered in this chapter

includes research design, sampling procedure, measurement variables and instrument design, data collection method, questionnaire design, and data analysis.

Based on the theories, concepts and frameworks discussed in the literature review, an **Exploratory cum Descriptive research design** is applied to arrive at conclusions. As the research is seeking a new insight into the subject of HR analytics by asking new questions and trying to bring a new light into it, thus the Descriptive Research – an exploratory approach has been chosen.

For this study, a total of 500 sample i.e 20 employees from every level of management of 26 organizations spread across 13 different sectors from various cities of India has been considered as a sampling unit. As the study is exploratory in nature, **Purposive sampling** was used to prepare to select organizations on the basis of obtainability of essential HR analytics practice.

In order to test the relationship of organizational performance and HR strategies with analytics as the mediator, a conceptual integrated model: Organizational Performance under HR Analytics has been developed and to test this model several hypothesis has been formulated. For testing the model, 5 point Likert scale with multiple items has been used which measures the independent, dependent and mediating variables. Data was then collected through the structured questionnaire which consisted of 2 CS, 3 TM, 3 WO, 3 HRA, and 3 OP items. Data was analyzed

with the help of Structural Equation Modelling (SEM) using SPSS version 20 and Amos version 23.

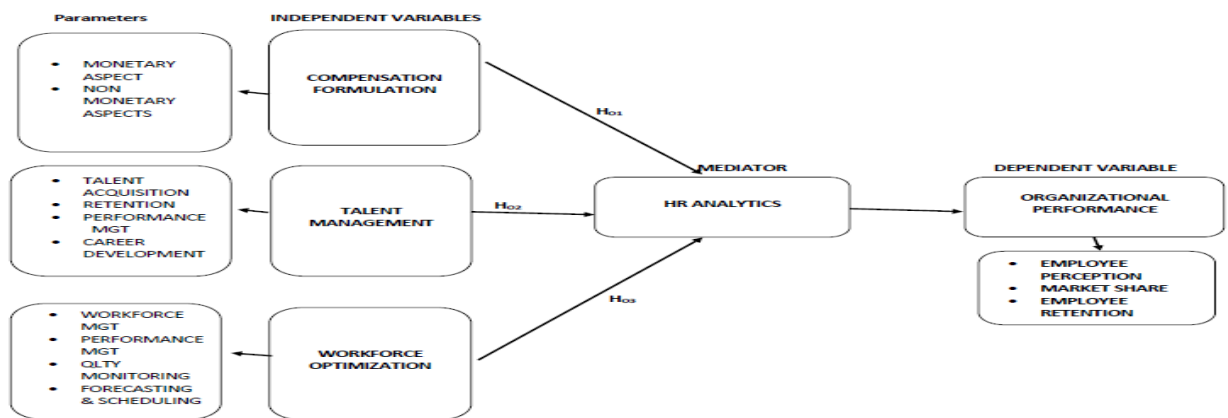
### **BROAD FINDINGS OF THE STUDY**

1. Proposed Conceptual Model of Organizational Performance under HR Analytics has been tested to a fit structural model. The three HR strategies does have a partial impact on the organizations performance.
2. HRA have a certain effect in formulation of compensation which in turn aids in the performance of the organization. So, it can be implied that for enhancing the performance of the organization a sound compensation strategy needs to be formulated and for doing so use of HR analytics gives a great advantage.
3. HR Analytics does mediates a partial relation between Talent Management and Organization's performance. Even though the mediation effect is partial, still HR analytics plays a substantial part in managing the talent in the organization to improve performance by supporting the HR Professionals in the organization to focus on improving the performance and productivity of employees and harness talent identification, recruitment, development, retention and workforce planning.
4. HR Analytics though helps in mediating the relation partially between optimization of workforce and Organizations performance, its influence is less nonetheless still play a significant role by facilitating optimization of workforce for improving the overall profitability through more effective workforce cost control.

5. HR Analytics acting as a mediator has proved to be beneficial for better performance of the organization. Although the organizational performance still goes on without the mediation effect still introducing HR analytics in the system has certainly given some better outlook of the problems which were hidden thus giving the bigger picture. Hence, HR Analytics is certainly a precursor to organizational performance.

**CONCLUSION**

Business houses worldwide are making an effort to keep its focus in the market, but for doing so its human assets needs to accomplish the organizational goals which are required. Several of its objectives are taken a cutting the cost, customer retention, expanding the quantity of clients, expanding the market rate, expanding item quality, creating innovative items, enhance profitability. HR are vital specially in accomplishing these performance indicators.



**Conceptual Integrated Model: Organizational Performance under HR Analytics**

The above study has given an empirical evidence that right formulation of the HR strategies with the help of HR Analytics does help the organizations to have better performance in the market. Properly planning and execution of HR strategies does have a huge impact on the overall business strategies. As human resources are a vital part of every organization, managing these employees gives an edge to every organization. Proper optimization of its workforce improves the company's employee performance and also helps in managing the headcount. Implementation of HR Analytics as a part of overall strategy, benefits in streamlining the internal HR systems of the organization as a result, contributing to better organizational performance.

Every facet of the HR strategy needs to be included while framing an overall business strategy. The conceptual integrated model in this study supports that HR strategies directly affect the overall business outcomes for instance collective skills, talent management and behaviors', and indirectly through HR analytics, these HR strategies improve organizational performance even more. Thus it can be said conclusively that HR Analytics is indeed a precursor for the organizational performance and framing compensation strategy.

#### ***LIMITATION OF THE STUDY***

There is dependably an opportunity to get better and this research study is not an exception. The study depends on the reactions of the sample respondents. The aftereffects of the examination are influenced by these reactions and are liable to change in a greater or diverse sample. These restrictions should be tended to in

future investigations. Just like every other research, this study was also bounded by several limitations. The limitations can be noted as follows:

- The sample chosen for the study only included respondents from the companies that are using HR Analytics in the Indian context.
- The data collection was also restricted to relatively large cities of India since constraints were faced during data collection.
- The sample for the present-day study involves 500 employees of different sectors of the industries hence is considered a minor proportion of the entire population of organizations in India
- Current study mostly depended on the quantitative approach of data collection and as a result quite restrictive.

## **RECOMMENDATIONS**

The theoretical outline of organizational performance under HR Analytics offers quite a lot of significant contributions that mainly highlights some of the most imperative approaches that will not only enable the improvement in organizations performance but also help them to become the market leaders in their respective industries. The research findings has evidently revealed that there is certainly an imperative effects of implementing HR analytics in overall HR strategy formulation for better organizational performance. Hence, organizations are recommended as follows:

1. HR analytics must deeply be embedded in the manpower planning as it helps the HR Managers to keep a tap on their manpower requirements.
2. HR analytics a vital portion of overall strategy formulation as it supports the organizations to keep a track on their employees' performance and constantly watch which employees requires training and development.
3. HR Analytics is able to foretell what their top talent requires based on their database and with the insightful information acquired, HR professionals will be able to strategized better package to retain their top talent. With the help of such information either the managers can develop better strategies to retain their employees or make new strategies for new talent acquisitions.
4. HR analytics empowers HR professionals to establish and develop a possible course of action which are grounded on historical data. This HR analytics implement allows the HR Managers in the organization create the difference by creating an easily derive strategy that will attract the best candidate to hire with the help of the historical data. From the previous data, troubled patterns are highlighted and HR practitioners decide the future course of action.
5. HR analytics correspondingly supports the company by looking at the professional life of their employees through tracing, by involving, and analyzing each of their performance linked data. With this insightful information derived from HR Analytics not only offers more understandings about the employees but also outline the strategies that will lift the morale of member of the staff, increase the retention rate, and formulate better engagement policies.

### **CONTRIBUTION OF THE STUDY:**

Every research conducted has one way or the other contributed to the society. Not every research leads to direct contribution to the society. But every research does have some impact on the society directly or indirectly. The study “HR Analytics as a precursor for Organizational Performance and compensation strategy: An Exploratory study in select Indian Organizations” also gave some partial significant contribution to the society.

1. As the study has shown the adaptation of HRA boost the performance of the organization hence have an emotional impact on the bottom line in quite a lot of ways. When the organizations performs the cost benefit analysis it has shown increase thus, giving the employees better benefits packages which does help the families of the employees have a suitable lifestyle.
2. Also through this study has shown that organizations can have much better recruitment strategies. With the good strategy it can weed out the ways to lure the new candidates i.e. recruitment of people more suited for the job thus giving opportunity for unemployed people.
3. As the HR Analytics helps in detecting performances of the workforce, it can formulate strategies which will help the employees to reduce their stress level. A happy employees will have a better family life.
4. Organizations can track and forecast future needs. This enables them to formulate better policies which will benefit society in the long run.

5. HR experts are discovering that increase in employees' feelings of fitting within the firm boost morale and productivity. Happy employees not only performs better in the office but also have a stable family life.

**DIRECTION FOR THE FUTURE RESEARCH:**

1. This study was concentrated only in HR aspects hence, future the researchers should also include other functions of the management like marketing, financial, operations etc. that play a part in measuring the overall performance of the organizations.
2. Since only quantitative approach has been used in this study, future researchers should also include qualitative approach to clarify or give better meaning to the results.
3. This study has only included three major HR strategies that impacts organizational performance. Future research can take up more variables of HR strategies which will give more in-depth understanding about the subject.
4. As only 26 organizations of 13 sectors could be included in the research, hence sample size should be increased to a larger number to get better results.
5. The study only concentrated on the public and private sectors in India. Thus in future the study should expand to government offices as well to see the difference in performance of the organizations.
6. Even more aspects of HR Strategies should be included in the future research as more HR aspects play a different role in the performance of the organizations.